

WHAT IS CLAIM IS:

1. A work inspection system comprising:

a conveyor table vertically positioned, and including a plurality of work-storing pockets for storing works, the work-storing pockets being formed inside the periphery of the conveyor table;

a work supply apparatus for supplying the works to the conveyor table;

a work inspection apparatus for inspecting the works stored in the work-storing pockets of the conveyor table, the work inspection apparatus being disposed near the conveyor table; and

a sorting and ejecting apparatus for sorting the inspected works stored in the work-storing pockets of the conveyor table in accordance with a property of the works and ejecting the same; wherein

the work-storing pockets of the conveyor table are positioned along one or more concentric circles.

2. A work inspection system according to claim 1, wherein

a table base is disposed on a rear surface of the conveyor table, and

circumferential vacuum sucking grooves, which are in communication with the work-storing pockets of the conveyor table and in communication with a vacuum system, are formed in the table base.

3. A work inspection system according to claim 2, wherein

the work-storing pockets of the conveyor tables are in communication with the vacuum sucking grooves of the table base through communication grooves.

4. A work inspection system according to claim 1,

wherein

the work supply apparatus includes an inclined guide chute for supplying the works, which is downwardly inclined to the conveyor table; and a distribution chute for introducing the works from the inclined chute to the work-storing pockets.

5. A work inspection system according to claim 1, wherein

the work supply apparatus includes a horizontal guide chute for supplying the works, which is horizontally extended to the conveyor table; and a distribution chute for introducing the works from the horizontal guide chute to the work-storing pockets.

6. A work inspection system according to claim 5, wherein

a driving mechanism for driving the works in the horizontal guide chute is disposed on the horizontal guide chute.

7. A work inspection system according to claim 4 or 5, wherein

the distribution chute has V-shaped transfer grooves which are in communication with the work-storing pockets.

8. A work inspection system according to claim 1, wherein

the work supply apparatus includes the horizontal guide chute for supplying the works, which is horizontally extended to the conveyor table, and wherein

the horizontal guide chute has V-shaped transfer grooves which are in communication with the work-storing pockets.

9. A work inspection system according to claim 7 or 8, wherein

each V-shaped groove has a V-shaped cross-section whose opening degree is equal to or more than 90°.

10. A work inspection system according to claim 4 or 5, wherein

the work supply apparatus further includes means for detecting a remaining amount of the works in the distribution chute.

11. A work inspection system according to claim 1, wherein

the work inspection apparatus has a pair of probes being capable of contacting the works in the work-storing pockets from the front and rear surfaces of the conveyor table, and, wherein

the probe on the rear surface side of the conveyor table is supported by a base which is disposed on the rear surface of the conveyor table through the table base.

12. A work inspection system according to claim 11, wherein

the probe on the rear surface side of the conveyor table is held on the base by a clamp bar which is slid on the base by a rotation of an eccentric cam.

13. A work inspection system according to claim 1, wherein

the sorting and ejecting apparatus includes means for jetting air to the works in the work-storing pockets, the means being disposed on the rear surface side of the conveyor table.

14. A work inspection system according to claim 2,

wherein

a pusher for pushing the conveyor table to disengage the same from the table base is disposed on the rear surface side of the conveyor table.